



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/701,865	11/05/2003	Joseph J. Kubler	14364US03	7803
7590	10/17/2006		EXAMINER	
Christopher C. Winslade McAndrews, Held & Malloy, Ltd 34th Floor 500 W. Madison St. Chicago, IL 60661				MOORE, IAN N
				ART UNIT
				PAPER NUMBER
				2616
DATE MAILED: 10/17/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/701,865	KUBLER ET AL.	
	Examiner	Art Unit	
	Ian N. Moore	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 08 September 2006.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 22-73 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 22-73 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____ .
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)	5) <input type="checkbox"/> Notice of Informal Patent Application
Paper No(s)/Mail Date <u>5/5/06; 6/22/06</u> .	6) <input type="checkbox"/> Other: _____ .

DETAILED ACTION

1. Claims 60 and 70 are objected to because of the following informalities:

Claim 60 recites the clause the optional language “**oprable to**” in lines 6. The claim scope is not limited by claim language that suggests or makes optional but does not require steps to be performed, or by claim language that does not limit a claim to a particular structure. Applicant is suggested to revise the claim, or clarify that the steps, which follows “oprable to”, to be performed are required (not optional).

Claim 70 is also objected for the same reason as set forth above in claim 60/

Claim 60 recites, “packets comprising digital voice data packetized according to a packet protocol” in line 4. For clarity, it is suggested to revise “packets comprising packetized digital voice data according to a packet protocol”, or equivalent thereof.

Appropriate corrections are required.

New Rejection

Claim Rejections - 35 USC § 102 (b)

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 22,27-29,32,35,36,39,42,47,50,51 and 54 are rejected under 35 U.S.C. 102(b) as being anticipated by Berken (WO 91/08629).

NOTE- Berken reference is disclosed in IDS submitted by the applicant on 5-3-2006, after the mailing first office action (which was mailed 5-2-2006). Thus, examiner introduces new grounds of rejection on claims 22-49 as being anticipated by Berken.

Regarding Claims 22,28,29,36 and 47, Berken discloses a system for processing voice for communication over a network (see FIG. 1A, wireless telecommunication system for voice and data communication; see page 4, line 6-9) comprising:

conversion circuitry (see FIG. 1C, phone interface 209) for converting analog voice signals to digital voice data (see FIG. 1C, phone interface 209 converts sound/voice input from telephone 127 into digital voice packets; see page 6, line 16-20) and for converting digital voice data to analog voice signals for the reproduction of voice (see FIG. 1C, phone interface 209 converts received digitized voice packets back into analog/sound signals for the telephone 127; see page 5, line 28 to page 6, line 5);

a processing circuit (see FIG. 1C, a combined system of processor 215, switch 213, phone 209) for managing the packetization of digital voice data to provide digital voice data packets (see FIG. 1C, a combined system 215,213,209 controls/manages converting of voice data to digital voice packets; see page 6, line 5-20) and for managing the depacketization of digital voice data (see FIG. 1C, a combined system 215,213,209 controls/manages converting of received digitized voice packets back into analog/sound signals for the telephone 127; see page 5, line 28 to page 6, line 5), the processing circuit packetizing the digital voice data according to a packet protocol (see FIG. 1C, a combined system 215,213,209 converting voice data in accordance with packet protocol/rule for transmission; see page 6, line 16-20); and

a transceiver circuit for wireless transmission and wireless reception (see FIG. 1A, C, Radio interface 211 circuitry/module which perform both transmitter and receiver functionalities) according to a wireless communication protocol of the digital voice data packets (FIG. 1C, see page 6, line 14-20; radio interface 211 of a user module 103 communicates by utilizing packet protocol/practice/procedure/rules), wherein the digital voice data packets comprises destination information (see FIG. 3, control time slot of frame; and/or FIG. 4, packet header of the voice time slot) used for routing the digital voice data packets (see page 9, line 1-10; see page 10, line 17-30; control time slot of the transmit/receive frame comprises target/destination routing/forwarding information through PSTN, Ethernet LAN, or Token Ring LAN; and/or a packet header of the voice time slot comprises target/destination routing/forwarding information through PSTN, Ethernet LAN, or Token Ring LAN).

Regarding Claims 25,33,40,57,58 and 59, Berken disclose a frequency hopping spread spectrum technique (see page 11, line 20-31; frequency hoping system of spread spectrum coding).

Regarding Claims 26,34, and 41, Berken disclose a direct sequence spread spectrum technique (see page 11, line 20-31; direct sequence spread spectrum coding).

Regarding Claims 32,39,50, Berken discloses conversion circuitry for converting analog voice signals to digital voice data (see FIG. 1C, phone interface 209 converts sound/voice input from telephone 127 into digital voice packets for radio transmission; see page 6, line 16-20) and for converting digital voice data to analog voice signals for the reproduction of voice (see FIG. 1C, phone interface 209 converts digitized voice packets received from radio interface back into analog/sound signals for the telephone 127; see page 5, line 28 to page 6, line 5).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 27,35,42-46, and 51-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Berken in view of Adachi (US 5,777,991).

NOTE- Berken and Adachi references are disclosed in IDS submitted by the applicant on 5-3-2006, after the mailing first office action (which was mailed 5-2-2006). Thus, examiner introduces new grounds of rejection on claims 51-59 in view of Berken and Adachi.

Regarding Claim 43, Berken discloses a system for processing voice for communication over a network (see FIG. 1A, wireless telecommunication system for voice communication; see page 4, line 6-9) comprising:

a processing circuit (see FIG. 1C, a combined system of processor 215, switch 213, phone 209) for managing the packetization of digital voice data to provide digital voice data packets (see FIG. 1C, a combined system 215,213,209 controls/manages converting of voice data to digital voice packets; see page 6, line 6-20) and for managing the depacketization of digital voice data (see FIG. 1C, a combined system 215,213,209 controls/manages converting of received digitized voice packets back into analog/sound signals for the telephone 127; see page 5, line 28 to page 6, line 5), the processing circuit packetizing the digital voice data according to a packet protocol (see FIG. 1C, a combined system 215,213,209 converting voice data in

accordance with packet protocol/rule for transmission; see page 6, line 16-20); wherein the digital voice data packets comprises destination information (see FIG. 3, control time slot of frame; and/or FIG. 4, packet header of the voice time slot) used for routing the digital voice data packets (see FIG. 3,4,9; voice packets comprise control/signaling information; see col. 3, line 20-40; see col. 5, line 34-46; see col. 6, line 52-65);

a transceiver circuit for wireless transmission and wireless reception (see FIG. 1A, C, Radio interface 211 circuitry/module which perform both transmitter and receiver functionalities) according to a wireless communication protocol of the digital voice data packets (FIG. 1C, see page 6, line 14-20; radio interface 211 of a user module 103 communicates by utilizing packet protocol/practice/procedure/rules).

Berken does not explicitly disclose a media access controller for controlling operation. However, Adachi teaches a media access controller for controlling operation of transceiver to transmit and receive information according to a wireless communication protocol (see FIG. 2-3, RF with RF driver; see col. 12, line 12-21; RF driver controls the radio transmitter 64 and receiver 66 (i.e. transceiver) to transmit/receive information/data according to RF/wireless communication protocol/practice/procedure/rules). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a media access controller for controlling operation, as taught by Adachi in the system of Berken, so that it would provide functions for measuring received signals intensity, channel setting, transmission power let setting, etc.; see Adachi col. 12, line 15-17.

Regarding Claim 51, Berken discloses a system for processing voice for communication over a network (see FIG. 1A, wireless telecommunication system for voice communication; see page 4, line 6-9) comprising:

a processing circuit (see FIG. 1C, a combined system of processor 215, switch 213, phone 209) for managing the packetization of digital voice data to provide digital voice data packets (see FIG. 1C, a combined system 215,213,209 controls/manages converting of voice data to digital voice packets; see page 6, line 6-20) and for managing the depacketization of digital voice data (see FIG. 1C, a combined system 215,213,209 controls/manages converting of received digitized voice packets back into analog/sound signals for the telephone 127; see page 5, line 28 to page 6, line 5), wherein the digital voice data packets comprises destination information (see FIG. 3, control time slot of frame; and/or FIG. 4, packet header of the voice time slot) used for routing the digital voice data packets (see page 9, line 1-10; see page 10, line 17-30; control time slot of the transmit/receive frame comprises target/destination routing/forwarding information through PSTN, Ethernet LAN, or Token Ring LAN; and/or a packet header of the voice time slot comprises target/destination routing/forwarding information through PSTN, Ethernet LAN, or Token Ring LAN), the processing circuit packetizing the digital voice data according to a packet protocol (see FIG. 1C, a combined system 215,213,209 converting voice data in accordance with packet protocol/rule for transmission; see page 6, line 16-20); and

a radio for wireless transmission and reception (see FIG. 1A, C, Radio interface 211 circuitry/module which perform both transmitter and receiver functionalities) of digital voice

data packets (FIG. 1C, see page 6, line 14-20; radio interface 211 of a user module 103

communicates by utilizing packet protocol/practice/procedure/rules) and

a processor (see FIG. 1C, processor 215) for controlling the operation of the radio according to a communication protocol (see FIG. 1A, controls/manage a radio transmission according to a radio protocol (i.e. TDMA); see page 10, line 23-33 for voice packet in PSTN or data packet in Ethernet LAN, or Token Ring LAN; see page 6, line 5 to page 8, line 4) that accommodates a plurality of bandwidth (see page 10, line 4 to col. 11, line 15; radio protocol provides different bandwidth for different services/data type).

Berken does not explicitly disclose data rates including at least a standard data rate and a higher data rate. However, Adachi teaches a processor (see FIG. 2, a combined system of Processor 90, Modem Controller 98, and Audio Processor AP 99) for controlling the operation of the radio according to a communication protocol (see col. 8, line 63 to col. 9, line 40; a combined system 90,98,99 controls/manages the operation of radio transmission according to radio transmission protocol) that accommodates a plurality of data rates including at least a standard data rate and a higher data rate (see col. 2, line 25-37; see col. 3, line 6-17; see col. 8, line 51-62; providing two data rates, one transfer rate at digital modulation rate (i.e. standard rate at speech frequency band) and another at higher transfer rate (i.e. higher rate exceeding the speech frequency band). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide data rates including at least a standard data rate and a higher data rate, as taught by Adachi in the system of Berken, so that it would provide excellent higher transfer rate, reliability and data security to the radio telephone; see Adachi col. 3, line 8-36.

Regarding Claims 27,35,42, Berken discloses wireless transmission and reception of digital voice data packets/transceiver utilizes a communication protocol (see FIG. 1A, controls/manage a radio transmission according to a radio protocol (i.e. TDMA); see page 10, line 23-33 for voice packet in PSTN or data packet in Ethernet LAN, or Token Ring LAN; see page 6, line 5 to page 8, line 4) that accommodates a plurality of bandwidth (see page 10, line 4 to col. 11, line 15; radio protocol provides different bandwidth for different services/data type).

Berken does not explicitly disclose data rates including at least a standard data rate and a higher data rate. However, Adachi teaches a processor (see FIG. 2, a combined system of Processor 90, Modem Controller 98, and Audio Processor AP 99) for controlling the operation of the radio according to a communication protocol (see col. 8, line 63 to col. 9, line 40; a combined system 90,98,99 controls/manages the operation of radio transmission according to radio transmission protocol) that accommodates a plurality of data rates including at least a standard data rate and a higher data rate (see col. 2, line 25-37; see col. 3, line 6-17; see col. 8, line 51-62; providing two data rates, one transfer rate at digital modulation rate (i.e. standard rate at speech frequency band) and another at higher transfer rate (i.e. higher rate exceeding the speech frequency band). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide data rates including at least a standard data rate and a higher data rate, as taught by Adachi in the system of Berken, so that it would provide excellent higher transfer rate, reliability and data security to the radio telephone; see Adachi col. 3, line 8-36.

Regarding Claims 44,45,52, and 53, the combined system of Berken and Adachi discloses all claimed limitations. Adachi further discloses wherein the wireless packet network

uses an Internet Protocol (IP), wherein IP protocol is TCP/IP (see FIG. 4, TCP/IP stack/protocol; see col. 10, line 4-9; see col. 12, line 34-49). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide TCP/IP, as taught by Adachi, in the system of Berken, so that it would provide capability to interpret the header of a message in accordance with TCP/IP stack, see Adachi col. 12, line 35-40; and it would also provide a interoperability with other system that utilizes TCP/IP protocol.

Regarding Claim 46, Berken discloses conversion circuitry for converting analog voice signals to digital voice data (see FIG. 1C, phone interface 209 converts sound/voice input from telephone 127 into digital voice packets for radio transmission; see page 6, line 16-20) and for converting digital voice data to analog voice signals for the reproduction of voice (see FIG. 1C, phone interface 209 converts digitized voice packets received from radio interface back into analog/sound signals for the telephone 127; see page 5, line 28 to page 6, line 5).

Regarding Claim 54, Berken discloses conversion circuitry for converting analog voice signals to digital voice data (see FIG. 1C, phone interface 209 converts sound/voice input from telephone 127 into digital voice packets for radio transmission; see page 6, line 16-20) and for converting digital voice data to analog voice signals for the reproduction of voice (see FIG. 1C, phone interface 209 converts digitized voice packets received from radio interface back into analog/sound signals for the telephone 127; see page 5, line 28 to page 6, line 5).

6. Claims 23,24,30,31,37,38,48,49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Berken in view of Perkins (US005159592A).

Regarding Claims 23,24,30,31,37,38,48,49, Berken does not explicitly disclose an Internet Protocol (IP), wherein IP protocol is TCP/IP. However, Perkins discloses wherein the wireless packet network uses an Internet Protocol (IP), wherein IP protocol is TCP/IP (see col. 4, line 10-20; see col. 7, line 35-56; col. 8, line 30-45; mobile unit 10 and access gateway utilizing TCP/IP).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide TCP/IP, as taught by Perkins, in the system of Berken, so that it would provide wireless migration users to a network operating in accordance with the TCP/IP protocol; see Perkins col. 2, line 55-60; see col. 3, line 15-30.

7. Claims 55 and 56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Berken in view of Cripps (US005838730A).

Regarding Claims 55 and 56, Berken disclose a frequency hopping spread spectrum technique (see page 11, line 20-31; frequency hoping system of spread spectrum coding). Berken explicitly disclose a frequency of approximately 2.4 gigahertz. However, using 2.4 GHz frequency hopping is well known in the art as defined by FCC. In particular, Cripps discloses wherein the wireless packet network communicates at a frequency of approximately 2.4 gigahertz (abstract; see col. 2, line 13-20; see col. 36, line 32-45; 2.4 GHz).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide 2.4 GHz, as taught by Cripps, in the system of Berken, so that it would provide a transmitter/receiver in accordance with FCC rules for 2.4 GHz ISM which is low cost and low power; see Cripps col. 2, line 15-32.

8. Claims 60, 61, 62, and 68-73 are rejected under 35 U.S.C. 103(a) as being unpatentable over Berken in view of Angle (US006366771B1).

Regarding Claim 60, Berken discloses one or more circuits for use in a handheld communication device supporting the exchange of voice over a communication network (see FIG. 1A, C, circuits/modules/components of wireless user device for voice communication in a network; see page 4, line 6-9), the one or more circuits comprising:

at least one interface to circuitry for transmitting and receiving over a radio frequency channel (see FIG. 1A, C, Radio interface 211 circuitry/module for both transmitting and receiving over an RF channel 107; see page 6, line 14-20; page 7, line 25-32), packets comprising digital voice data packetized according to a packet protocol (see FIG. 1C, packets comprises packetized/converted voice data in accordance with packet protocol/rule for transmission; see page 6, line 16-20);

at least one processor (see FIG. 1C, a combined system of processor 215, switch 213, phone 209) operably coupled to the at least one interface (see FIG. 1C, couples to radio interface 211), the at least one processor operable to,

convert analog voice signals at a first user location (see FIG. 1A, first User device; see FIG. 5, first user module UM1; see page 9, line 28-33) to first digital voice data (see FIG. 1C, phone interface 209 converts sound/voice input from telephone 127 into digital voice data for packetizing; see page 6, line 16-20);

packetize the first digital voice data according to the packet protocol to produce first digital voice data packets (see FIG. 1C, phone interface 209 converts/packetize digital voice data

Art Unit: 2616

into voice packets; see page 6, line 16-20), wherein the first digital voice data packets comprise destination information (see FIG. 3, control time slot of frame; and/or FIG. 4, packet header of the voice time slot) used for routing the first digital voice data packets through the communication network (see page 9, line 1-10; see page 10, line 17-30; control time slot of the transmit/receive frame comprises target/destination routing/forwarding information through PSTN, Ethernet LAN, or Token Ring LAN; and/or a packet header of the voice time slot comprises target/destination routing/forwarding information through PSTN, Ethernet LAN, or Token Ring LAN);

wirelessly transmit, in accordance with a wireless communication protocol, the first digital voice data packets (see FIG. 1A,C, see page 6, line 14-20; the user module 103 transmits voice packets over radio channel 107 in accordance with radio protocol/practice/procedure/rule);

wirelessly receive, in accordance with the wireless communication protocol, second digital voice data packets (see FIG. 1A,C, see page 6, line 14-20; the user module 103 received voice packets from RF channel 107 in accordance with a radio protocol/practice/procedure/rule);

depacketize the second digital voice data packets to produce second digital voice data (see FIG. 1C, phone interface 209 depacketizes/converts digitized voice packets back into digitized voice data for the telephone 127; see page 5, line 28 to page 6, line 5); and

convert the second digital voice data to analog voice signals at the location of the second user (see FIG. 1C, phone interface 209 converts digitized voice data into analog/sound signals for the telephone 127; see page 5, line 28 to page 6, line 5).

Berken does not explicitly disclose to a second user. However, a user device sending voice packet to another user over the network is well known in the art. In particular, Angle

teaches the first digital voice data packets (see FIG. 20A-C; voice packet 621) comprise destination information used for routing the first digital voice data packets (see FIG. 20 A-C, destination address/number; see col. 18, line 33-52) through the communication network (see FIG. 1, backbone network 20) to a second user (see FIG. 1, the receiving user device on the network); see col. 5, line 1-65). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a second user, as taught by Angle in the system of Berken, so that it would enable to route automatically to the destination; see Angle col. 18, line 40-49.

Regarding Claims 61 and 62, Angle discloses wherein the wireless packet network uses an Internet Protocol (IP), wherein IP protocol is TCP/IP (see col. 17, line 60 to col. 18, line 5; utilizing TCP/IP).

Regarding Claim 68, Berken disclose a frequency hopping spread spectrum technique (see page 11, line 20-31; frequency hoping system of spread spectrum coding).

Regarding Claim 69, Berken disclose a direct sequence spread spectrum technique (see page 11, line 20-31; direct sequence spread spectrum coding).

Regarding Claim 70, Berken disclose wherein the at least one processor (see FIG. 1A,C; a combined system of processor 215, switch 213, phone 209) is further operable to cause routing of digital voice data packets over a wired network (see page 9, line 1-10; see page 10, line 17-30; the combined system of 215, 213 and 209 routes/forwards voice packets over PSTN, Ethernet LAN, or Token Ring LAN).

Regarding Claim 71, Berken disclose wherein the routing of a call is selected by the first user (see FIG. 1A,C; a user enters/selects (from user input terminals 169,165 or 127) destination

address/number (i.e. the routing of a call) in order to establish the call/connection; see page 9, line 1-10; see page 10, line 17-30).

Regarding Claim 72, Berken disclose the wired network comprises a packet network (see FIG. 1A, see page 9, line 1-10; see page 10, line 17-30; Ethernet LAN, or Token Ring LAN).

Regarding Claims 73, Berken discloses the wired network is a conventional switched telephone network (see FIG. 1A, PSTN 151; see page 9, line 1-10; see page 10, line 17-30).

9. Claims 63-65 are rejected under 35 U.S.C. 103(a) as being unpatentable over Berken in view of Angle, and further in view of Lewen (US005341374A).

Regarding Claim 63, the combine system of Berken and Angle discloses wherein the at least one processor received digital voice data and conversion of digital voice data as set forth above in claim 60.

Neither Berken nor Angle explicitly discloses queues received data and delays conversion of queued data for an adjustable period of time. However, Lewen teaches queuing (see FIG. 4, queuing/storing/collecting common memory 80) received digital voice data (see FIG. 2, collect received samples 120; see col. 14, line 44-49) and delays conversion of queued digital voice data for an adjustable period of time (see FIG. 2, delay time for storing/collecting voice samples in the memory before packetizing is adjusted between Tw (walktime) up to Tbfr (buffer storage time)); see col. 15, line 5-9,15-30. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to queue received data and delays conversion of queued data for an adjustable period of time, as taught by Lewen in the

combined system of Berken and Angle, so that it would provision a communication system which effectively provides integrated voice, data and video communication and also provide real time reception of voice communication; see Lewen col. 2, line 50-62.

Regarding Claim 64, Lewen further discloses adjusts the period of time based upon a network propagation delay (see col. 13, line 56-66; see col. 14, line 22-39; see col. 15, line 5-9,15-30; adjusting delay time according Tw (propagation delay)). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to adjust the period of time based upon a network propagation delay, as taught by Lewen in the combined system of Berken and Angle, for the same motivation as set forth above in claim 63.

Regarding Claim 65, Lewen further discloses adjustable period of time using a packet sent to the communication device in response to a packet sent by the communication device (see col. 13, line 56-66; see col. 14, line 22-39; see col. 15, line 5-9,15-30; adjusting delay time according Tw (propagation delay), which is a time required for a signal bit of a frame/packet to travel from transmitting node to receive node). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide adjustable period of time using a packet sent to the communication device in response to a packet sent by the communication device, as taught by Lewen in the combined system of Berken and Angle, for the same motivation as set forth above in claim 63.

10. Claim 66 is rejected under 35 U.S.C. 103(a) as being unpatentable over Berken in view of Angle and Lewen, and further in view of McKee (US005477531A).

Regarding Claim 80, neither Berken, Angle nor Lewen explicitly disclose a test packet.

However, McKee discloses determining propagation delay or queuing delay by utilizing in response to test packet sent by the communication device (see FIG. 2, test packet; see col. 1, line 60 to col. 2, line 60).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a test packet, as taught by McKee, in the combined system of Berken, Angle and Lewen, so that it would provide to determine/test propagation delay or queuing delay; see McKee abstract col. 2, line 20-32.

11. Claim 67 is rejected under 35 U.S.C. 103(a) as being unpatentable over Berken in view of Angle, and further in view of Cripps (US005838730A).

Regarding Claim 67, Berken disclose a frequency hopping spread spectrum technique (see page 11, line 20-31; frequency hoping system of spread spectrum coding). Berken explicitly disclose a frequency of approximately 2.4 gigahertz. However, using 2.4 GHz frequency hopping is well known in the art as defined by FCC. In particular, Cripps discloses wherein the wireless packet network communicates at a frequency of approximately 2.4 gigahertz (abstract; see col. 2, line 13-20; see col. 36, line 32-45; 2.4 GHz).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide 2.4 GHz, as taught by Cripps, in the combined system of Berken and Angle, so that it would provide a transmitter/receiver in accordance with FCC rules for 2.4 GHz ISM which is low cost and low power; see Cripps col. 2, line 15-32.

Original Rejection

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 22,27-29,32,35,36,39,42,47,50,51 and 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weaver (US005956673A) in view of Drakopoulos (US005506848A).

Regarding Claims 22,28,29,36 and 47, Weaver discloses a system (see FIG. 2, Remote unit 10) for processing voice for communication (see FIG. 1, remote vocoder 15) over a network (see FIG. 2, Wireless network 20) comprising:

conversion circuitry (see FIG. 1, Encoder 180 and Decoder 90) for converting analog voice signals to digital voice data (see FIG. 1, Encoder 180 performs A/D conversion) and for converting digital voice data to analog voice signals for the reproduction of voice (see FIG. 1, Decoder 90 performs D/A conversion; see col. 3, line 25-40; col. 4, line 40-59);

a processing circuit (see FIG. 1, Encoder 180 and Decoder 90) for managing the packetization of digital voice data to provide digital voice data packets (see FIG. 1, Encoder 180 performs packetizing) and for managing the depacketization of digital voice data (see FIG. 1, Decoder 90 decodes packets into digital voice), the processing circuit packetizing the digital voice data according to a packet protocol (see col. 3, line 20-40; col. 4, line 20-39, 40-67; see col. 5, line 34-67; packetizing according to a packet protocol); and

a transceiver circuit (see FIG. 2, Transceiver in a remote unit 10) for wireless transmission and wireless reception according to a wireless communication protocol of the digital voice data packets (see col. 4, line 40-67; transmitting over wireless link according to wireless protocol), wherein the digital voice data packets comprises information used for routing the digital voice data packets (see FIG. 3,4,9; voice packets comprise control/signaling information; see col. 3, line 20-40; see col. 5, line 34-46; see col. 6, line 52-65).

Weaver does not explicitly disclose destination information. However, it is well known in the art when forming and routing packets/frames over the network to remote end/destination, one must use destination address/number/information to route. In particular, Drakopoulos teaches wherein the digital voice packets comprise destination information (i.e. signaling/control information) used for routing the outgoing digital voice packets (see col. 5, line 31-42; using the address of the destination end user in voice packet for routing through the wireless network). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the use of destination information for routing the digital voice packet, as taught by Drakopoulos in the system of Weaver, so that it would ensure to establish and route the voice packet to destination end user, and it would also maximize utilization of system resources and optimize performance; see Drakopoulos col. 1, line 64-67; see Drakopoulos col. 2, line 15-39.

Regarding Claim 51, Weaver discloses a system (see FIG. 2, Remote unit 10) for processing voice for communication (see FIG. 1, remote vocoder 15) over a network (see FIG. 2, Wireless network 20) comprising:

a processing circuit (see FIG. 1, Encoder 180 and Decoder 90) for managing the packetization of digital voice data to provide digital voice data packets (see FIG. 1, Encoder 180 performs packetizing) and for managing the depacketization of digital voice data (see FIG. 1, Decoder 90 decodes packets into digital voice), wherein the digital voice data packets comprises information used for routing the digital voice data packets (see FIG. 3,4,9; voice packets comprise control/signaling information; see col. 3, line 20-40; see col. 5, line 34-46; see col. 6, line 52-65), the processing circuit packetizing the digital voice data according to a packet protocol (see col. 3, line 20-40; col. 4, line 20-39, 40-67; see col. 5, line 34-67; packetizing according to a packet protocol); and

a radio for wireless transmission and reception of digital voice data packets (see FIG. 2, Radio Transceiver in a remote unit 10; see col. 4, line 40-67) and

a processor (see FIG. 1, Encoder 180) for controlling the operation of the radio according to a communication protocol that accommodates a plurality of data rates (see col. 1, line 25-37; see col. 5, line 55-59; see col. 9, line 33-34; plurality of data rates) including at least a standard data rate and a higher data rate (see col. 1, line 25-37; see col. 6, line 13-25; see col. 9, line 33-35; low or less than full (i.e. half or quarter) data rate and full data rate).

Weaver does not explicitly disclose destination information. However, it is well known in the art when forming and routing packets/frames over the network to remote end/destination, one must use destination address/number/information to route. In particular, Drakopoulos teaches wherein the digital voice packets comprise destination information (i.e. signaling/control information) used for routing the outgoing digital voice packets (see col. 5, line 31-42; using the address of the destination end user in voice packet for routing through the wireless network).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the use of destination information for routing the digital voice packet, as taught by Drakopoulos in the system of Weaver, so that it would ensure to establish and route the voice packet to destination end user, and it would also maximize utilization of system resources and optimize performance; see Drakopoulos col. 1, line 64-67; see Drakopoulos col. 2, line 15-39.

Regarding Claims 27,35,42, Weaver discloses wireless transmission and reception of digital voice data packets/transceiver utilizes a communication protocol that accommodates a plurality of data rates (see FIG. 1, Encoder 180; see col. 1, line 25-37; see col. 5, line 55-59; see col. 9, line 33-34; plurality of data rates) including at least a standard data rate and a higher data rate (see col. 1, line 25-37; see col. 6, line 13-25; see col. 9, line 33-35; low or less than full (i.e. half or quarter) data rate and full data rate).

Regarding Claims 32,39,50,54, Weaver discloses conversion circuitry (see FIG. 1, Encoder 180 and Decoder 90) for converting analog voice signals to digital voice data (see FIG. 1, Encoder 180 performs A/D conversion) and for converting digital voice data to analog voice signals for the reproduction of voice (see FIG. 1, Decoder 90 performs D/A conversion; see col. 3, line 25-40; col. 4, line 40-59).

14. Claims 23,24,30,31,37,38,48,49,52 and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weaver in view of Drakopoulos, as applied to claims 22,29,36,47,51 above, and further in view of Perkins (US005159592A).

Regarding Claims 23,24,30,31,37,38,48,49,52, and 53, neither Weaver nor Drakopoulos explicitly disclose an Internet Protocol (IP), wherein IP protocol is TCP/IP. However, Perkins discloses wherein the wireless packet network uses an Internet Protocol (IP), wherein IP protocol is TCP/IP (see col. 4, line 10-20; see col. 7, line 35-56; col. 8, line 30-45; mobile unit 10 and access gateway utilizing TCP/IP).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide TCP/IP, as taught by Perkins, in the combined system of Weaver and Drakopoulos, so that it would provide wireless migration users to a network operating in accordance with the TCP/IP protocol; see Perkins col. 2, line 55-60; see col. 3, line 15-30.

15. Claims 43 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weaver (US005956673A) in view of Harrison (US 5,796,727).

Regarding Claim 43, Weaver discloses a system (see FIG. 2, Remote unit 10) for processing voice for communication (see FIG. 1, remote vocoder 15) over a network (see FIG. 2, Wireless network 20) comprising:

a processing circuit (see FIG. 1, Encoder 180 and Decoder 90) for managing the packetization of digital voice data to provide digital voice data packets (see FIG. 1, Encoder 180 performs packetizing) and for managing the depacketization of digital voice data (see FIG. 1, Decoder 90 decodes packets into digital voice), the processing circuit packetizing the digital voice data according to a packet protocol (see col. 3, line 20-40; col. 4, line 20-39, 40-67; see col. 5, line 34-67; packetizing according to a packet protocol); wherein the digital voice data

packets comprises information used for routing the digital voice data packets (see FIG. 3,4,9; voice packets comprise control/signaling information; see col. 3, line 20-40; see col. 5, line 34-46; see col. 6, line 52-65);

a transceiver circuit (see FIG. 2, Transceiver in a remote unit 10) for wireless transmission and wireless reception according to a wireless communication protocol of the digital voice data packets (see col. 4, line 40-67; transmitting over wireless link according to wireless protocol).

Weaver does not explicitly disclose destination information and a media access controller for controlling operation. However, Harrison teaches wherein the digital voice packets (see col. 4, line 45-49; 65 to col. 5, line 7; packets of voice data) comprise destination information used for routing the outgoing digital voice packets (see FIG. 5; MS adding destination address into packet; see col. 6, line 5-12; see col. 7, line 35 to col. 8, line 15; see col.12, line 39-61);

a media access controller (see col. 5, line 25-31; MAC) for controlling the operation of the transceiver to transmit and receive information according to a wireless communication protocol (see col. 12, line 39-61; MAC controls/process transmit and receive information according to IEEE wireless protocol). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide destination information and MAC, as taught by Harrison in the system of Weaver, so that it would ensure to establish and route the packets of voice data to destination end user, provide various classes of data communication services as well as voices services, and provide registration and channel/bandwidth allocation; see Harrison col. 3, line 22-26; see col. 4, line 50-55; see col. 7, line 35-55.

Regarding Claim 46, Weaver discloses conversion circuitry (see FIG. 1, Encoder 180 and Decoder 90) for converting analog voice signals to digital voice data (see FIG. 1, Encoder 180 performs A/D conversion) and for converting digital voice data to analog voice signals for the reproduction of voice (see FIG. 1, Decoder 90 performs D/A conversion; see col. 3, line 25-40; col. 4, line 40-59).

16. Claims 44 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weaver in view of Harrison, as applied to claim 43 above, and further in view of Perkins (US005159592A).

Regarding Claims 44 and 45, neither Weaver nor Harrison explicitly discloses an Internet Protocol (IP), wherein IP protocol is TCP/IP. However, Perkins discloses wherein the wireless packet network uses an Internet Protocol (IP), wherein IP protocol is TCP/IP (see col. 4, line 10-20; see col. 7, line 35-56; col. 8, line 30-45; mobile unit 10 and access gateway utilizing TCP/IP).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide TCP/IP, as taught by Perkins, in the combined system of Weaver and Harrison, so that it would provide wireless migration users to a network operating in accordance with the TCP/IP protocol; see Perkins col. 2, line 55-60; see col. 3, line 15-30.

17. Claims 25,33,40, and 55-59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weaver in view of Drakopoulos, as applied to claims 22,29,36,47 above, and further in view of Cripps (US005838730A).

Regarding Claims 25,33,40,57,58 and 59, neither Weaver nor Drakopoulos explicitly disclose a frequency hopping spread spectrum protocol. However, using frequency hopping spread spectrum protocol is well known in the art. In particular, Cripps discloses wherein the wireless packet network communicates frequency hopping spectrum protocol (abstract; see col. 2, line 13-20; see col. 36, line 32-45; 2.4 GHz).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide frequency hopping spread spectrum protocol with 2.4 GHz, as taught by Cripps, in the combined system of Weaver and Drakopoulos, so that it would provide a transmitter/receiver in accordance with FCC rules to support frequency hopping spread spectrum 2.4 GHz ISM which is low cost and low power; see Cripps col. 2, line 15-32.

Regarding Claims 55 and 56, neither Weaver nor Drakopoulos explicitly disclose a radio comprises a 2.4 gigahertz, wherein the radio operates in accordance with a frequency hopping spread spectrum protocol. However, using 2.4 GHz frequency hopping is well known in the art as defined by FCC. In particular, Cripps discloses disclose a radio comprises a 2.4 gigahertz, wherein the radio operates in accordance with a frequency hopping spread spectrum protocol (abstract; see col. 2, line 13-20; see col. 36, line 32-45; 2.4 GHz).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide 2.4 GHz frequency hopping protocol, as taught by Cripps, in the combined system of Weaver and Drakopoulos, so that it would provide a transmitter/receiver in accordance with FCC rules for 2.4 GHz ISM which is low cost and low power; see Cripps col. 2, line 15-32.

18. Claims 26,34, and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weaver in view of Drakopoulos, as applied to claims 22,32,52 above, and further in view of Honing (US005481533A).

Regarding Claims 26,34, and 41, neither Weaver nor Drakopoulos explicitly disclose a direct sequence spread spectrum technique. However, using direct sequence spread spectrum technique is well known in the art. In particular, Honing discloses wherein the wireless packet network communicates using a direct sequence spread spectrum technique (abstract; see col. 2, line 34-40).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide direct sequence spread spectrum technique, as taught by Honing, in the combined system of Weaver and Drakopoulos, so that it would suppress interference; see Honing col. 2, line 38, line 38-40.

Response to Arguments

19. Applicant's arguments with respect to claims 22-59 have been considered but are moot in view of the new ground(s) of rejection.

Regarding claims 22-59, the applicant argued that, “...the proposed combination of references does not teach, suggest, or discloses... “ the digital voice data packets comprise destination information used for routing the digital voice data packets through the network”... Any signaling that take place has nothing to do with routing the packets, and does not represent information use for routing digital voice packets...” in page 14, paragraph 3, page 15, paragraph 1,3; see page 16, paragraph 4; page 19, paragraph 2-3.

In response to applicant's argument, the examiner respectfully disagrees with the argument above since the combined system of Weaver and Drakopoulos discloses the claimed invention.

Weaver discloses the digital voice data packets comprises information used for routing the digital voice data packets (see FIG. 3,4,9; **voice packets comprise control/signaling information; see col. 3, line 20-40; see col. 5, line 34-46; see col. 6, line 52-65**). It is well known in the art when forming and routing packets/frames over the network to remote end/destination, one must use destination address/number/information to route. Also, Drakopoulos teaches wherein the digital voice packets comprise destination information (i.e. signaling/control information) used for routing the outgoing digital voice packets (see **col. 5, line 31-42; using the address of the destination end user in voice packet for routing through the wireless network**).

Thus, it is clear that the combined system of Weaver and well established teaching in art, or the combined system of Weaver and Drakopoulos clearly discloses the argued claim the limitation. Moreover, Weaver's voice packet comprises control/signaling information for routing/switching; otherwise (as one skill in the ordinary would clearly see that) it is impossible know where or how to route/switch this voice packet. Thus, it is clear that applicant argument "signaling that take place has nothing to do with routing the packet" with regards to Weaver is simply incorrect.

In response to applicant's argument, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231

USPQ 375 (Fed. Cir. 1986). In this case transmission of voice packet over a RF link is already disclosed by Weaver, and thus Drakopoulos is not required to disclose voice packet since the rejection is based on the combined system of Weaver and Drakopoulos.

In response to applicant's argument, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). In this case, examiner is not “bodily” replacing Weaver voice packet with Drakopoulos packet. Instead, examiner is utilizing the teaching of Drakopoulos to show the well-known functionality of packet switching where a packet is switched with a destination address to switch/route from a sender to the receiver.

Regarding claims 22-42,47-59, the applicant argued that, “...Drakopoulos fails to teach or suggest ...“ the digital voice data packets comprise destination information used for routing the digital voice data packets through the network”...the use of...destination information used for routing digital voice packets through the communication network is not well known in the context of the elements...certainly was not well known at the time of applicant invention....Applicant request that the examiner cites a prior art reference that specifically shows what the Examiner alleges is well known...reservation request of Drakopoulos is different from, and fails to teach or suggest a digital voice packet... ” in page 15, paragraph 2-3; page 16, paragraph 1-4; page 19, paragraph 2-3.

In response to applicant's argument, the examiner respectfully disagrees with the argument above since the combined system of Weaver and Drakopoulos discloses the claimed invention as set forth in above response.

Moreover, Drakopoulos teaches wherein the outgoing digital voice packets comprise destination information (i.e. **signaling/control information**) used for routing the outgoing digital voice packets through the wireless packet network (see col. 5, line 31-42, 44-60; see col. 3, line 55-65; see col. 6, line 1-10; **using the address of the destination end user in voice packet for routing through the wireless network**). Drakopoulos discloses TDMA frames that are being sent from mobile terminal to base station, and each TDMA frames contains time slots; see col. 3, line 55-65; see col. 5, line 31-36. Each time slot contains multiple channels with request channels (i.e. destination information) and voice channels (i.e. voice packet). Clearly, examiner is asserting an entire TDMA frame as applicant digital voice packet since a frame has a destination information (in request channel for signaling/control) which followed by voice packet (in payload or voice packet channel). One cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Thus, it is clear that the combined system of Weaver and Drakopoulos discloses the argued claimed invention.

Examiner does not understand the applicant argument of “using destination information for routing digital voice packets through the communication network” is not well established or well known in the art. How could one make a phone call to the remote user, but not defining a remote user address/telephone use for routing a call through the network? How could one mail a

letter to the other person, but not writing the destination address used for routing the letter? It is clear to one ordinary skill in the art that it would be impossible “not to include destination information” use for routing a call/mail to the receipt, and “destination information” must contain in the frame/packet which is routed over the network.

Moreover, it is so well known in the art that TDMA or radio frame contains destination information for routing through the communication network” as one can evident from the following prior arts:

Angle (US006366771B1)- FIG. 20A-C, destination address embedded within voice packet header before transmission from portable phone 100; see col. 18, line 32-55.

Hershey (US005481539A)- FIG. 4, Destination ID and data field in the TDMA frame and data; see entire document.

Harrisson (US 5,068,916)- FIG. 3, Destination address 48b and data field 48e in the TDMA frame; see entire document.

Berry (US 5,758,256)- voice packet comprising destination information (i.e. message type, sequence number) and data field; see col. 5, line 64 to col. 6, line 9.

The following prior arts recite the well known and establish concept of **a packet/frame header comprises destination information for routing through the communication network**.

Miller (US 4,641,302), FIG. 3, destination address in the header field of a voice packet; see col. 3, line 20-30.

Callens (US 4,630,262)- see col. 2, line 15-65; destination address added to voice packet;

Fischer (US005502726A)- routing a packet header with destination address from one node to the other over a network; entire document

Cerna (US005444707A)- embedding destination information within a header portion of a voice information packet; see claim 4 and 5.

Agrawal (US 4,493,021)- FIG. 2, destination address (DA) in the packet header and data block; see entire document.

Richter (US006104706A)- FIG. 6, a packet 52 with destination address 76, destination count 70,72,74 in a packet header and data 78, where packet 52 contains audio data representing one speaker's voice; see col. 7, line 10-20.

Kline (US006157653A)- FIG. 3, a voice packet with header 302 with connection identifier and sequence number 306 used routing/switching over the network and a payload 304 with voice data- see entire document.

In accordance with the applicant's request examiner cited above prior arts to support examiner assertion of well known in the art. Also, once skilled in the ordinary art would clearly evident that "**a packet header**" must contains "**destination information**" when sending from one end to the other end.

Regarding claims 43, the applicant argued that, "...Harrison teaching apply to data, not voice, and that Harrison fails to discloses...*the handling of voice...MTSO 43 does not pass through the MDSC 42...not to voice packets processed by the MTSO 43*...Harrison fails to teach the MS "adds **destination address** into packet" applies to a voice packet...nether Harrison nor Weaver teaches wherein the digital voice data packets comprises destination information used for routing the digital packets through the network..." in page 17, paragraph 3 to page 18, paragraph 1-2.

In response to applicant's argument, the examiner respectfully disagrees with the argument above.

Weaver discloses the digital voice data packets comprises information used for routing the digital voice data packets (**see FIG. 3,4,9; voice packets comprise control/signaling information; see col. 3, line 20-40; see col. 5, line 34-46; see col. 6, line 52-65**). It is well known in the art when forming and routing packets/frames over the network to remote end/destination, one must use destination address/number/information to route. Harrison teaches wherein the digital voice packets (**see col. 4, line 45-49; 65 to col. 5, line 7; packets of voice data**) comprise destination information used for routing the outgoing digital voice packets (**see FIG. 5; MS adding destination address into packet; see col. 6, line 5-12; see col. 7, line 35 to col. 8, line 15; see col.12, line 39-61**); a media access controller (**see col. 5, line 25-31; MAC**) for controlling the operation of the transceiver to transmit and receive information according to a wireless communication protocol (**see col. 12, line 39-61; MAC controls/process transmit and receive information according to IEEE wireless protocol**). Thus, it is clear that the combined system of Weaver and Harrison discloses the claimed invention.

With regards to the arguments on specificity of how packets are switched in the wired network (i.e. *the handling of voice...MTSO 43 does not pass through the MDSC 42...not to voice packets processed by the MTSO 43*), are irrelevant since none of the claimed recites any specific limitation on how packets are switch in the wired network. (Emphasis added).

In response to the argument on “Harrison teaching applies to data, not voice”, Harrison is not required to provide or applies to “voice packet” since “**transmission of voice packets over the radio network**” has already been disclosed by Weaver, and the rejection is based upon

the combined system. One cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Thus, it is clear that the combined system of Weaver and Drakopoulos discloses the argued claimed invention. Although it is not required, Harrison still discloses a voice packet in col. 4, line 44-47 as follows:

In a digital cellular system, it is important to note that the MTSO's 26 and 28 each contains a fast packet switch. The switch serves to route **packets of (voice) data** between the various cells 2, 4, 6, 8 and 10 and the PSTN 30. (Emphasis added)

In response to the argument on “Harrison fails to teach the MS “adds destination address into packet”, Harrison discloses adding destination address (i.e. DA per FIG. 5) and col. 12, line 38-61 as follows:

The MAC Frame 90 is subdivided into small fragments of, say 400 Bytes, and each of these is framed as **a Wireless MAC Frame 94 by adding short source (SA) and destination (DA) identifiers for the MS 40 (FIG. 2) and CC 2 (FIG. 1) respectively**. Also included are a TYPE field that specifies the type of service required by this frame, a COUNT field indicating the number of fragments to be transmitted and the position of this fragment in the sequence, and a CRC (Cyclic Redundancy Check) field for error detection; more sophisticated Forward Error Correction schemes are also possible. **The resulting Wireless MAC Frame 96 can then be transmitted via the wireless link 60 (FIG. 3) from the MS 40 to the CC 2.** (Emphasis added)

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., **destination address**) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Conclusion

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ian N. Moore whose telephone number is 571-272-3085. The examiner can normally be reached on 9:00 AM- 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris To can be reached on 571-272-7629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

INM
10-3-06


DORIS H. TO
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600